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Statement of
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and
House Subcommittee on Oversight
Committee on Science, Space and Technology
United States House of Representatives

Chairmen, Ranking Members, and other Members of the Subcommittees, thank you for the opportunity to appear today to provide you information regarding the NASA role in, and commitment to, the National Oceanic and Atmospheric Administration (NOAA) Joint Polar Satellite System (JPSS) and Geostationary Operational Environmental Satellite-R Series (GOES-R) Programs. The JPSS and GOES-R Programs are critical to the Nation's weather forecasting, environmental monitoring and research activities.

Building on a History of Success

NASA and NOAA have been partners for more than 40 years in developing the Nation's polar and geosynchronous weather satellites. Following the restructure of the National Polar-orbiting Operational Environmental Satellite System (NPOESS) program in 2010, NASA and NOAA returned to this successful partnership for JPSS. A NASA program office for JPSS was created and is staffed with a complement of NASA civil servants and contractors. NOAA and NASA established joint agency-level program management councils to oversee JPSS, and have integrated their decision-making processes to efficiently and effectively manage this cooperative activity.

The NASA and NOAA teams have continually demonstrated a strong working relationship over the last four years, and together have successfully launched the Suomi National Polar-orbiting Partnership (Suomi-NPP) and the Total Solar Irradiance Calibration Transfer Experiment (TCTE).

Recently, NASA and NOAA successfully completed the development of the Deep Space Climate Observatory (DSCOVR), which will maintain the nation's real-time solar wind monitoring capabilities. These measurements are critical to the accuracy and lead time of space weather alerts and forecasts. Once it reaches its destination at the first Sun-Earth Lagrangian

point (L1), DSCOVR will help provide timely and accurate warnings of space weather events like the geomagnetic storms caused by changes in solar wind, which have the potential to disrupt nearly every major public infrastructure system, including power grids, telecommunications, aviation and Global Positioning System (GPS).

The JPSS Program is Executing Well

The JPSS Program consists of three polar missions: Suomi-NPP, JPSS-1 and JPSS-2. Having successfully transitioned to the execution and implementation phase, the overall program is executing on the schedule and within the budget established when the program was baselined in July 2013. This progress is a true testament to the evolution and effectiveness of the NOAA and NASA partnership. NASA, as NOAA's acquisition agent, manages all of the JPSS instrument, spacecraft, and major ground system contracts, utilizing expertise from NASA Headquarters and the NASA Goddard Space Flight Center.

Suomi-NPP celebrated its 3-year on-orbit anniversary this past October. The satellite was developed to extend the record of key observations from the NASA Earth Observing System (EOS) series of satellites and to demonstrate space flight and ground data processing technologies for the next generation of operational polar-orbiting meteorological satellites. While the satellite was not originally intended to be used as an operational asset, NOAA is using Suomi-NPP data in its operational weather forecasting models. The satellite is operating well and is producing outstanding data with high availability (~99.99%). The satellite operations transitioned from NASA to NOAA in 2013, and the mission continues to satisfy both NASA and NOAA needs.

The JPSS-1 mission is on track towards the planned 2nd Quarter FY 2017 launch. The spacecraft Integration Readiness Review was completed in December and both the Clouds and Earth Radiant Energy System (CERES) and the Ozone Mapping and Profiler Suite - Nadir (OMPS-N) instruments have been fully integrated with the spacecraft. The VIIRS and Cross-track Infrared Sounder (CrIS) instruments have completed environmental testing and held their pre-ship reviews earlier this month.

All JPSS-2 instruments are under contract and are in various states of build. The spacecraft bus procurement is underway and contract award is planned for April 2015. NASA and NOAA are working to accelerate the JPSS-2 Launch Readiness Date (LRD) from its current baseline of first quarter of Fiscal Year (FY) 2022 in order to reduce the probability of a gap between JPSS-1 and JPSS-2. NASA shares NOAA's strong desire to mitigate any potential data gaps that could adversely affect the Nation's weather forecasting capability. Any potential gap could also impact the continuity of data used by NASA scientists for various research.

The next major milestone for the JPSS Program is the JPSS-1 mission Systems Integration Review, which is currently planned for the end of this month. The objective of the review is to evaluate the readiness of the mission for system assembly, test and launch operations, and will

therefore focus on the readiness of the last two instruments. The VIIRS and CrIS instruments are to be delivered for integration with the spacecraft later this month. The remaining instrument, the Advanced Technology Microwave Sounder (ATMS) is undergoing rework and is currently planned for delivery and integration later this summer.

GOES-R Series Program Continues to Make Progress

The GOES-R Series Program of four geosynchronous satellites continues to make progress toward launching GOES-R, the first satellite of the series, in the second quarter of FY 2016 and manufacturing GOES-S, the second satellite of the series, with a planned launch date in the third quarter of FY 2017. Last year, the GOES-R Series Program successfully completed the GOES-R spacecraft Mission Operations Review, System Integration Review, and Key Decision Point-D, allowing the spacecraft to enter the assembly, integration and test phase. All of the instruments have been integrated on the spacecraft, with three of the instruments completing initial baseline testing in preparation for the GOES-R spacecraft environmental test campaign. Good progress continues with the GOES-S spacecraft component and spacecraft structural manufacturing. Three of the six GOES-S instruments, the Advanced Baseline Imager, the Extreme Ultraviolet and X-ray Irradiance Sensor, and the Solar Ultraviolet Imager, have completed environmental testing.

The next major milestones for the GOES-R Series Program are the GOES-R Spacecraft Pre-Environmental Review currently planned for this March and the GOES-S System Integration Review currently planned for the first quarter of FY 2016.

Conclusion

NASA and NOAA are committed to the JPSS and GOES-R programs, and ensuring the success of these programs is essential to both agencies and the Nation. The NASA and NOAA teams have established strong working relationships and are striving to ensure that weather and environmental monitoring requirements are met on the most efficient and predictable schedule without reducing system capabilities. I am confident the NASA/NOAA partnership will successfully develop and deliver the next-generation polar and geosynchronous weather satellites to our Nation.

Mr. Chairmen and Ranking Members, I appreciate the continued support of these Subcommittees and the Congress, and I would be pleased to respond to any questions you or the other Members of the Subcommittees may have.